Studies on the financing of fisheries development in West Africa

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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

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Studies on the financing of fisheries development in West Africa

The financing of small-scale fisheries
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The financing of industrial fisheries
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PREPARATION OF THIS DOCUMENT

This document has been prepared as part of FAO's Regular Programme activities aimed at assisting the work and deliberations of the Fishery Committee for the Eastern Central Atlantic (CECAF). The two papers contained in this document expand on contributions made by the authors to a short seminar on the financing of fisheries development organized in conjunction with the Eighth Session of the CECAF Sub-Committee on Fishery Development held in Douala, Cameroon, 5-6 December 1988.

The first paper, which focuses on the small-scale sub-sector, was prepared by Dr. D. Gréboval. The second paper, which focuses on the industrial sub-sector, was prepared by Mr. M. Robinson.

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ABSTRACT

This document contains two papers on selected aspects of the financing of fisheries development in West Africa with special reference to the fisheries of the CECAF area. The paper by D.F. Gréboval covers selected issues related to the financing of the small-scale fisheries sub-sector. Typically characterized by labor-intensive activities, the financing requirements of the sub-sector are shown to be nevertheless important due to a high reliance on imported equipment and to the increasing range and complexity of small-scale fisheries activities. A major issue addressed by the author is the respective role which traditional sources of finance and institutional credit could play to ensure further development based on more advanced technologies and related support organizations. Other issues pertaining to the financing of small-scale fisheries development are addressed in reference to subsidies, input supply policies, the provision of infrastructure and externally-funded projects.

The paper by M.A. Robinson describes the history of attempts to establish industrial fishery ventures in West Africa. It notes a marked difference of experience between the ex-French and British colonies. Although there are exceptions, in the former group of countries, interest came mainly from local entrepreneurs, who had made money in other sectors of the economy. In the francophone countries much of the interest was from expatriates with fishing experience in other parts of the Atlantic. The paper notes three phases in the development of industrial fishing ventures - the early pioneering phase from about 1952 to 1960, a swing towards public ownership from 1960 to about 1980 and from 1980 onwards a renewed interest in encouraging private investment. The paper outlines the financial facilities which are available in some typical countries, but concludes that the main difficulty in developing local industrial fishing ventures is that the heavy fishing of the stocks has driven down the catch per unit of effort to levels which make it difficult for a new entrant to succeed.

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THE FINANCING OF SMALL-SCALE FISHERIES [1]

by

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I. INTRODUCTION

In the Fishery Committee for the Eastern Central Atlantic (CECAF) region, marine catches by small-scale fishermen are estimated at about 700 000 tons per annum, which represents nearly half the total catch by coastal African States. The contribution of small-scale fisheries to food supply and nutrition is extremely important with the greater part of the catch being consumed nationally or traded within the region. Overall, fishing, post-harvest and accessory activities undertaken by the small-scale fisheries sector represent an important source of employment and value added.

Small-scale fisheries are typically characterized by labour-intensive activities based on technologies which require a relatively low capital outlay both in terms of investment and operational costs. Nevertheless, investment costs are increasing and the units and required support organization are becoming more sophisticated. For example, the basic investment required for a purse-seining fishing canoe unit now exceeds US $ 10 000, which puts ownership well beyond the scope of most fishermen. Not only is the canoe fishery becoming more costly to enter ; it is also becoming more concentrated, with more canoes basing their activities in sheltered landing places in ports and small urban areas where the infrastructures and market linkages they require are more readily available. Even if capital requirements for subsistence fisheries activities are very low, the increasing range and complexity of small-scale fisheries activities have important financing implications.

Major issues pertaining to the financing of small-scale fisheries development are addressed below in reference to key elements such as credit ; subsidies ; input supply ; the provision of infrastructure and projects aimed at providing a wide range of inputs and services.

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[1] The author wishes to acknowledge valuable notes and comments provided by Mr. G. Everett, Coordinator of the Programme for Integrated Development of Artisanal Fisheries in West Africa (IDAF).

II. TRADITIONAL SOURCES OF FINANCE

At a recent consultation on African fisheries organized by the African Development Bank, it was noted that traditional sources of finance (from fisherfolk themselves, family members, traders, money lenders, thrift and loan groups essentially) are still playing a very important and useful role in financing small-scale fisheries activities (ADB, 1987). It was also noted that some negative aspects of this informal credit system, particularly the high interest rate being charged, were often balanced by the facilities provided by the middlemen or other lenders, which are generally beyond the scope of formal credit institutions (e.g. small loans, quick availability, flexible repayment terms).

In many parts of West Africa, the family bond is very strong and kinship systems play a key role in the provision of finance. For example, Vercruijsse (1984) notes, in relation to the Ghanaian gillnet fishery, that the kinship system and the relative independence with which the wife earns (and has to earn) her income help to supplement earnings from fishing and to make these earnings more readily available to the household.

Moreover, the "banking" function which the wife performs, and which acts as a buffer between the fishermen and indebtedness, is very much tied up with her trading role. Financing, like other inputs and services made available within the kinship system is not costed according to market criteria but rather reflects reciprocal obligations (Afful and Osafo-Gyimak, 1979). These obligations generally involve the sharing of benefits among family members or kin, according to their contribution to a more or less integrated production process as well as to other socio-cultural criteria. It has been noted that while these fishermen are having some success in reducing their dependence on traders, they are still hampered by the fishwife system and by their kinship tradition, e.g. ceremonies and other social obligations which reduce their ability to accumulate capital (Vercruijsse, 1984).

Inter-professional financing is as common as family financing in West Africa. In this context, financing is provided by people directly involved in related fisheries activities (e.g. the financing of fishermen by traders or fish processors) with kinship linkages remaining an important factor. It applies especially to large-scale transactions for which credit involves both cost and risk sharing, the risk being shared by the implied semi-integration of harvesting, processing and marketing activities.

As for family financing, inter-professional financing rarely stipulates the payment of interest in formal terms and actual repayment conditions are generally linked to access to fish. Typically, fish processors or traders also operating as creditors

would prefer an arrangement whereby they can claim the right to buy part of the fishermen's catch at a preferential price (White and Wenthold, 1988). The credit relationship not only gives the traders a hold over the supply of fish, but also helps to turn potentially the terms of trade against the fishermen. Such financing appears, indeed, to be more binding and possibly more exploitative than family financing.

An example is provided by the informal financing arrangements linking the influential group of market women ("nanas") to foreign canoe fishermen in Lomé, Togo (Weigel, 1987). The women may give preferential treatment to Ghanaian fishermen from the Ewe tribe who are of their lineage, but no commercial preferences are given to fishermen from other Ghanaian groups (such as the Gas, Adas or Fanti). The women will look after crew lodging, medical and living expenses, cost of the trip to Lomé, and loan of funds to ensure purchase of motor and new gear, etc. However, they demand that all fish be sold at a price fixed by the women themselves. Loans may be accorded to non-Ewe fishermen at interest rates of up to 70 percent. Nevertheless, in spite of these high costs the fishermen are given a chance to earn higher incomes than they would have done in Ghana, and the ease with which the loan can be obtained appears to be appreciated. The market women can grant loans at short notice and of a type linked to immediate needs of the fishermen's operation. Although the interest rate is high the market women take risk, and often bear with default or slow repayment. The supplementary cost to non-Ewe fishermen can be interpreted as a sort of payment for the right to take part in the canoe fishery at Lomé. In this context, formal institutional finance for the canoe fishery has never been able to compete with the informal traditional system for provision of finance, not only because of the pressure of market women but also because the officials in the formal institutions were never able to provide a competitive flexible service to blend in with the fishermen's needs.

Another example is provided by Price (1987) who describes a typical situation observed in Guinea Conakry as follows : "Young men normally initiate independent fishing operations with seed money furnished by paternal kin. If financing from kin is inadequate, resources are solicited from other community members (friends, age-mates, etc.) and then from local merchants. Reimbursing kin and community does not include any interest, and kin are generally not reimbursed for the full value of the loan. Merchants participate in financing major investments (such as motors and canoes). Although some fishermen claimed that these loans are repaid without interest, other evidence indicates that important charges are paid in one form or another with interest charged as high as 100 percent. Lenders generally prefer payment in kind - that is fresh or smoked fish - rather than in cash. Equivalent values are calculated at local market rates with additional fish being periodically allocated to

the lender as part of the relationship between the two parties. Men and women interviewed consistently emphasized the role of "trust" in client-merchant transactions".

The extent of family and inter-professional financing in small-scale fisheries in West Africa reflects a social, rather than individual, process of production and capital accumulation in which kin and family ties play a key role. It also reflects both a certain scarcity of capital - or at least its rather wide distribution within the communities - and a definite strategy of risk sharing which itself implies a relative integration of fishery activities at operational and financial levels.

Traditional financing schemes present advantages and weaknesses which are very much linked to the two major principles on which they are based : social solidarity and risk-sharing. On the one hand traditional financing allows for a very flexible and socially efficient mobilization of capital which benefits a wide array of people including the less favoured. On the other hand it often fails to channel funds towards more risky, capital intensive or longer-term investments. Traditional financing also implies a relatively wide redistribution of benefits (generally among people with a high consumer propensity) which limits capital accumulation. This is illustrated by the fact that migrant fishermen, like the Beninese fishermen operating in Congo, are generally able to accumulate more capital and to re-invest this capital in larger fishing units than those remaining in their country where they are subject to the pressure of social solidarity.

The actual cost of traditional financing is another issue. Family financing appears to be a priori of a less "exploitative" nature. However, it should be noted that while family financing does not necessarily include any interest, it does imply the informal agreement to provide similar services in the future.

In comparison, inter-professional financing does carry interest in some form or another at rates which may be as high as 100 percent. This has prompted many people to view such financing as outright exploitation. However, such high rates are to a certain extent justified by the high opportunity cost of capital which is a prevailing characteristic of rural Africa ; the risk involved in financing such operations on the basis of trust rather than collaterals ; and by the types of services and the flexible terms which the creditors are providing. Furthermore, inter-professional financing is generally priced on a rather competitive basis, even in remote landing places where fishermen and processors might be quite dependent on financing by a few large-scale traders.

Informal credit is also provided by credit clubs or saving associations such as the tontines, compins, esusu or osurus which

are common sources of financing although these have been shown to play only a minor role in financing economic activities. Indeed, several researchers have shown these clubs or saving mechanisms to be especially used to provide back-up financial support to members - generally on a rotating basis - in case of unforeseen difficulty or for celebrations rather than being a serious channel for a large amount of capital to be invested in productive activities (e.g. Atti Mama, 1986 ; Leblanc, 1987). Even if these funds are sometimes used in fisheries communities to cover small recurrent costs like fuel, netting material or minor engine repairs, their allocations to members is more related to social status or circumstances than to any expected profitability. This explains why some groups, women for example, are given low priority in the allocation process as shown by White and Wenthold (1988).

III. INSTITUTIONAL CREDIT SCHEMES

Most countries in West Africa have commercial and development banks with branches located in both urban and rural areas in order to mobilize saving and provide credit facilities on a broader scale. In some countries, revolving funds, thrift and loan schemes as well as cooperatives also play an important role in mobilizing saving and providing credit for specific activities.

It remains, however, that in most countries small-scale fisherfolk operate from relatively remote areas outside the often quite limited rural network of financial institutions. Furthermore, there is often a rather widespread distrust of these institutions, especially in rural areas. This is easily understandable in view of the bureaucratic procedures with which small-scale fisherfolk can hardly be expected to be comfortable ; the delays involved ; and the rather strict terms which seldom coincide with the nature of fishing activities and small borrowers' needs.

The average loan size for such items as nets, engines or revolving funds for fish processing and marketing is small, especially when compared with the relatively high administrative costs involved. Small-scale fishermen are generally mobile and scattered and lack fixed assets which could be used as collateral. These factors make it difficult for financial institutions to obtain loan security and they increase the administrative cost of lending, the need for debt collection, and the overall risk involved. As a result banks are generally unwilling to develop the expertise and branch network required to support small-scale fisheries.

The World Bank (Anon, 1987) admits that its projects aimed at providing loans to small-scale fisheries through formal institutions have had very limited success to date and have further increased income disparities as five percent of the borrowers have received 80 percent of the credit. Numerous other externally-provided lines of

credit have been plagued with similar difficulties. The IFAD project on Lagune Aby (Côte d'Ivoire) and the EDF artisanal fisheries project in The Gambia provide examples of the difficulty of maintaining an efficient credit organization over a number of years. Basically, when loans are widely available on relatively soft terms it becomes difficult to ensure proper repayment and thus the revolving of initial funds. The dilemma is, however, that the tightening up of loan procedures often means that ultimately less finance finds its way to the small-scale fisherfolk and that the more credit worthy people are seldom representative of the target groups.

Until recently, most credit schemes have aimed at promoting certain development initiatives in small-scale fisheries, generally in relation to new or improved technologies. In this context, credit schemes have often been quite successful from an economic point of view, although they have very seldom been financially viable for the lending institution. Kebe (1982) shows, for example, that credit facilities provided by the BNDS (Banque nationale de développement du Sénégal) and through other schemes for the modernization of artisanal craft had a significant impact on the development of small-scale fisheries over the last two decades. Although the Government of Senegal had to pay boat owners' debts of over US$ 3 million, these schemes have generated a significant development and, in relative terms, very important net economic benefits. A similar result has been observed in Ghana where the so-called "Charter Party Scheme" undertaken for a number of years by the Fisheries Division and later by the Agricultural Development Corporation has, to a large extent, been a key factor in the development of advanced artisanal fishing units (Lawson and Kwei, 1974).

The economic successes of these two schemes have something in common : the attention paid concurrently to the training of fishermen in the handling of the new technologies and to the provision of technical and management advice. Failure to provide such complementary services has too often led to poor performances. For example, under a credit line granted to the Ghana Agricultural Bank, 80 loans were provided in 1982-1983 to assist with the purchase of inboard engines for the rehabilitation of the inshore fleet. The rate of repayment of these loans has been about 60 percent, considerably below the expected rate. This is mostly explained by the poor financial performance of the fishing units, due to inadequate spares and support from the local agent for the engine, poor construction of engine beds and installation, inadequate maintenance, i.e. problems which for the most part could have been alleviated with proper technical assistance.

Based on such experiences, a number of national and international financing institutions have recently come to realize

that training and the provision of technical assistance are key complements to development-oriented credit schemes.

Aside from achieving their development purpose, sustainable credit schemes should also be financially viable, which, as seen above, has seldom been the case in the past. If not, these would continue to mostly amount to short-term subsidy programmes paid by the Government or the institutions guaranteeing the loans. At this level, new approaches are being tested which call for added emphasis on :

- Joint liability groups at community, family or club levels, which reduce the risk of lending to mobile people or people with no collateral ;

- Lending to established collective organizations or villages rather than concentrating on individuals with the possibility of making these organizations responsible for the administration of small-loan schemes ;

- Provision of credit extension services with properly trained credit extensionists going to fisherfolk rather than the other way around ;

- Provision of credit in kind, which is a way to ensure that loans are actually used for the intended purpose but also raises difficulties, in particular vis-à-vis the selection and appropriateness of the material being provided ;

- Setting of interest rates at realistic level, i.e. a level high enough to guarantee the replenishment of the fund and to attract savings ;

- The provision of technical and business management assistance if credit is aimed at introducing or developing new technologies.

A number of institutions have recently initiated schemes which closely follow the above guidelines. This is the case for example of the Caisse nationale de crédit agricole in both Senegal and Morocco where group lending, realistic rates, extension work in credit and complementary technical assistance (in the case of Senegal) are emphasized. The same principles have been applied by the Rural Bank of Ghana for some years with apparent success. This bank also emphasized a gradual approach to lending (loans are only provided to regular customers, first for small amounts and progressively for larger amounts based on past repayment experience) and flexible terms for repayment of loans to fishermen based on the seasonality of the fisheries although this does not apply to processors and traders. While this approach has brought about better results, the

financial viability of the credit scheme implemented by the Rural Bank at a rate of interest of 23 percent has still to be achieved.

In fact, the above guidelines and recent experience in Ghana in particular are essentially bringing the procedure of institutional credit delivery closer to those prevailing in the informal sector. When one accounts for the high per-unit transaction cost and the risk involved, the interest rates and margins required for viable and self-sustaining credit schemes may not be much lower than those observed for informal credit provided under relatively competitive conditions. Thus the need to recognize that formal credit schemes should particularly aim at complementing the informal credit market, especially in areas where it has been shown (after careful assessment) to be deficient: e.g. with respect to certain target groups, areas, technologies or segment of the production process.

IV. SUBSIDIES

Subsidies are relevant to the issue of small-scale fisheries financing as they do play an important role in the determination of investment and operational costs.

At the FAO/CECAF/IDAF Workshop on Small-scale Fisheries Development and Management held at Lomé, Togo, in November 1985 (CECAF, 1986), the following recommendations were made concerning subsidies :

1. The attention of governments should be called to the negative aspects (for public finance and the fishery sector) of long-term subsidies.

2. The effect of subsidies should be studied before their introduction, as well as the means to reduce or stop them in the short or medium term when appropriate. The amount of taxes on inputs should also be studied.

3. There is the need to ensure participation of the target group in the formulation and implementation of policies leading to subsidies.

4. Except for a fishing industry in its infancy, subsidies are not generally recommended. Even at that stage, the time of introduction must be well studied and a limit on their duration imposed.

5. Governments with subsidy programmes should review them with a view to reduce them so as to improve the performance of the industry.

6. It is essential for governments to concentrate their efforts on making fishing inputs and equipment readily available without necessarily subsidizing them.

In the small-scale fisheries sub-sector, subsidies mostly involve fiscal incentives in the form of reduced taxes and duties on fishing inputs (fuel, engines, fishing gear). The pricing of imported inputs is indeed a most important factor to this sub-sector as these inputs represent a very important share of the investment cost for fishing units in general and of operational cost for motorized units.

It should be noted that these incentives seldom imply disbursements by the Treasury but more often take the form of foregone tax revenue. For instance, many countries do not impose any import tax on agricultural inputs but do tax imported fishing inputs, although often at a reduced rate.

Generally, the issue is not whether to subsidize or not but rather to determine an appropriate level of taxation for these inputs. For nets and outboard engines import taxes vary widely in the CECAF area. In 1986 for example these were respectively 15 percent and 8 percent in Togo ; 15 and 18 percent in Benin ; 44 percent and 34 percent in Sierra Leone ; 60 percent and 38 percent in Gabon ; 37 percent and 47 percent in Cameroon ; and 50 percent and 80 percent in Senegal (Haling and Wijkström, 1986). One notes, however, that in most countries a significant amount of equipment is provided tax free through aid projects and stores operated by fisheries development institutions.

Fiscal incentives are generally targetted more on the industrial sub-sector than on the artisanal. For example, industrial vessels operate on a tax-free basis in Morocco while fuel is subsidized (giving the fleet an additional benefit) but artisanal fishermen only benefit from a partial exemption of import tax on fishing nets.

Specific subsidy programmes have had mixed success in the CECAF area, although assessing the impact of these programmes is generally difficult as performances are often linked to a variety of factors including a wide range of interventions by governmental institutions.

In Nigeria, financial support to the small-scale fisheries since 1970 involved :

a) The provision of credit facilities under most favourable terms : interest rate of six to nine percent, small down payment, grace period, etc. ;

b) A 50 percent subsidy on the CIF price of all fishing material and accessory equipment which, considering prevailing import taxes, implied an effective subsidy rate of about 20 percent of the FOB price of equipment provided through government institutions ; and

c) An extensive infrastructure development programme under which equipment such as ice making facilities were constructed and made available to fishing communities at little or no cost. The cost of the programme has been estimated at over ₦ 10 million per year for the period 1981-84 (Mabawonku, 1988). Small-scale fishermen further benefited from the very low price of petrol prevailing in Nigeria (US$ 0.10 per litre in 1987).

Analyses of the recent development of the subsector in Nigeria have shown only a limited correlation between total landings and the amount of financial support (Mabawonku, 1985 and 1988). It is possible that the lack of capital might not have been a significant constraint to fisheries development in Nigeria. The support channelled to fisheries was part of a major programme to keep investment from being channelled away from the agriculture sector as a whole. Its success, however, appears to have been limited by opportunities in other sectors. Indeed, between 1980 and 1985 financial support to the agriculture sector by commercial banks fell from five percent of total loans and advances in 1980 to 1.1 percent in 1985.

In Senegal, the Government has been operating a system aimed at substantially reducing tax on fuel and petrol used by fishing vessels and canoes for over ten years. The subsidy served principally to mitigate the sharp increase in price of fuel in the mid 1970's but was continued afterwards under the pressure of the industry even though world prices had then declined. Petrol is presently sold at US$ 0.50 per litre, i.e. at less than half the regular market price. The price of petrol to fishermen has also been kept low in Ghana (US$ 0.25 per litre compared to about US$ 0.80 per litre in neighbouring Togo and Côte d'Ivoire). There is no doubt that such a policy has reduced operational costs and stimulated the development of motorization in both countries. However, Frielink (1985) has shown that such a policy also encouraged input distortion, i.e. through the use of engines larger than necessary and the use of active rather than static gear, thus increasing total costs to the sector and to the economy as a whole.

While both countries impose relatively stiff import duties on fishing gear and outboard engines, a large part of this equipment is sold duty-free to small-scale fishermen. In Ghana, an important amount of fishing equipment has been made available to the small-scale fishery sector since 1982 through loans and grants provided by the ADB and the EEC. The decision taken in 1985 to

abolish import tax on this equipment amounts to an important subsidy (vis-à-vis imports into the remainder of the economy) being provided to the sub-sector as nearly all engines now operating and a large part of the nets used have been supplied through these schemes. Apart from disrupting established import and distribution channels, this partial subsidy scheme may unfortunately not lead to any long-term benefits. Indeed, and this is typical, the rehabilitation of the Ghanaian fleet is taking place in a situation characterized by heavy exploitation which itself induces loss of profitability. Although a subsidized rehabilitation can in similar context be dictated by social and political considerations, its actual impact might be short-lived and, from an economic point of view, counterproductive if full exploitation has already been achieved.

In Senegal, high taxation of inputs can be seen as an appropriate way of limiting the overexploitation of well-developed fisheries, with national input supply schemes like CAMP and CAPAS, and aid projects providing duty-free inputs for the development of specific fisheries areas or for specific target groups. However, focussed interventions are often much diluted in practice, and aid project and input supply schemes are too often short-lived. The CAMP/CAPAS input supply scheme is indeed an exception, having been operational for the last 18 years, although at times severely affected by liquidity problems. Similar schemes in the CECAF area have been generally far less successful, with the actual non-revolving of initial funds being the overriding reason for their failure.

A similar approach would generally not be appropriate for countries when artisanal fisheries resources are globally underexploited or where gear supply is inadequate. Indeed, it amounts to subsidizing fishermen in a limited number of project areas while heavily taxing other less fortunate ones which, as in the case of Sierra Leone, may lead to severely unbalanced development. Reduced taxation and a more homogeneous pricing policy would in such cases be more appropriate.

Other types of subsidies have been implemented in the CECAF area. For example, an export subsidy was introduced in Senegal amounting to 15 percent of the FOB value of the products. As a result of this subsidy, from April 1981 through 1983, the government paid out CFA 3.6 billion (about US$ 10 million) to fish exporting companies. While this programme induced export growth, it has been shown that manufactured exports in non-subsidised sectors had grown faster ; and for subsectors already oriented to export markets (e.g. fish) the subsidy had been accompanied by export expansion, but not any faster than the growth before subsidy was introduced (World Bank, 1984). The subsidy may have intensified the extra effort to buy high value fish landed by artisanal fishermen, for direct export. On the other hand the export trade of this fish probably

would have been initiated without an export subsidy (given the high demand for quality marine products in Europe). Thus export subsidy was probably a costly and unnecessary transfer of finance to the fishery sector. Discontinuation of this subsidy scheme as well as the fuel subsidy scheme has been contemplated but, as is generally the case, a gradual reduction has been opted for, due to various social and political considerations.

The fixing of fish prices and the uncontrolled imports of fish provided as fees in kind in the context of foreign licensing of industrial vessels are also indirect subsidies imposed by governments. Price control as practised in Guinea-Bissau for some years generally amounts to subsidizing consumers to the detriment of producers. Uncontrolled and therefore cheap imports of fish, as observed in Guinea Conakry in the past, do often depress producer prices and amounts to subsidizing urban consumers. Such practices reduce profitability and thus further investment in the sector, generally leading to overall stagnation.

Globally, the small-scale fishery sub-sector of the CECAF region has not received major subsidies. Extensive programmes undertaken in a few countries have had a mixed success and have shown the risk attached to such schemes. For the most part, subsidies have been provided in the form of tax-free inputs handled through aid projects and government schemes, themselves supplied generally through external loans and grants. The impact of this policy on the supply of inputs is further analysed in the next section.

V. SUPPLY OF FISHING EQUIPMENT

Very much related to financing is the price which fishermen have to pay for fishing equipment in general and for imported inputs in particular. Prices have been shown to vary widely from country to country. For example, Haling and Wijkström (1986) report that a 25 HP Yamaha engine which cost less than US$ 1 000 in Togo in 1986 was sold in the same period at about US$ 1 800 in Senegal and US$ 2 200 in Sierra Leone.

High input prices have several major implications : they are to a certain extent reflected at the consumer level through higher fish prices ; they often reduce fishing efficiency as producers under-equip themselves, using less robust or ill-adapted but cheaper equipment over longer periods of time ; and they are a disincentive to new investment. On the other hand, they may deter over investment in well-developed fisheries and thus serve to maximise the rent more effectively than would otherwise be the case.

There are three major reasons for the wide price discrepancies observed at input level, viz: the tax structure, the difficulty and

cost of access to foreign exchange in countries with soft currencies, and the structure and efficiency of the importation and distribution of equipment.

The level of taxation, as discussed in the previous section, should be commensurate with the state of exploitation of small-scale fisheries resources, further taking into consideration that the possibility of raising taxes when these fisheries become heavily exploited is severely constrained by socio-economic and political considerations.

Access to foreign exchange by local entrepreneurs is sometimes a matter of policy. Given the important role played by small-scale fisheries, this sub-sector should a priori receive priority attention, and adequate monitoring should allow for determining its basic foreign exchange needs as well as mechanisms for its allocation. Fisheries authorities can intervene at this level to avoid input shortages and resulting high prices. However, it also happens that in some countries foreign exchange shortages are at times so severe that every sector tends to become a priority and that import-dependent activities such as fisheries will suffer especially.

The structure and efficiency of the importation and distribution of fishing inputs is to a large extent influenced by the above considerations and is also a matter of policy. Interventionist policies have prevailed in many countries with government institutions being very much involved in these activities. The impact of such interventions has generally been : (a) a high government cost both in terms of subsidized equipment and of the high cost of operating a specialized distribution network ; (b) a private or commercial importation and distribution network which is artificially made less competitive and often relegated to a minor role, and (c) periodic shortages when government schemes run out of funds or when aid projects end. This situation is worsened when credit schemes are implemented concurrently and affected by low repayment rates.

In some countries the sudden gift of engines and materials may upset the supply and discourage the commercial companies from holding stocks or making further orders. This has been the case in particular in Cameroon and Senegal where large donations from a donor country have upset the market and disarrayed the local agents. Other donors have also given large amounts of equipment at unexpected times to many coastal countries, periodically affecting commercial suppliers and markets.

Low input cost as well as adequate and sustained supply of fishing equipment can in fact be achieved at a lower cost to government and producers by pursuing a simple and less erratic

policy based on moderate taxation and relatively unconstrained imports. Even in countries where foreign exchange is in relative short supply fishing equipment imported through various externally-funded schemes could be made available to distributors on a commercial basis. This approach does not prevent the subsidizing and distribution of equipment in specific development projects aimed at popularizing new techniques as long as this does not disrupt existing equipment supply structures.

Input supply policies should further account for the fact that across-border trade in fishing equipment is important due to the mobility and seasonal migrations of fishermen. This calls for some coordination at sub-regional level, especially with respect to a certain harmonization of import duties.

Another issue is the quality of the equipment supplied, which is often, but not necessarily, linked to the difficulty of importing fishing equipment. A survey conducted in selected West African countries in 1986 shows that frequently the gear and engine size ordered were not in accordance with the requirements of small-scale fishermen (Haling and Wijkström, 1986). The lack of spare parts for outboard engines is also a recurrent problem in many countries. This is mostly due to incorrect technical specification in purchase orders and the lack of technical competence of suppliers.

Fisheries Departments should address this issue by carefully monitoring demand for engines and gear, conducting periodic cost-quality checks with foreign and national suppliers, and training both importers and distributors in correctly specifying purchase orders. Extension assistance to small-scale fishermen is also required to improve maintenance and repairs of engines and gear so as to increase their efficiency and durability, indirectly reducing demand for imported inputs.

The local production of fishing nets has in the past been seen as a way to increase net supply at a lower cost but, although some local net factories do manage to keep working, it is often cheaper to import netting. As a result many factories have to be subsidized either directly or indirectly by not paying duties on imported inputs and equipment.

VI. PROVISION OF INFRASTRUCTURES

The financing of small-scale fisheries also involves the provision of infrastructures although it should be noted that canoe-based fisheries normally require little infrastructure support. Large infrastructure support has in the past focussed on the provision of cold chains and marketing networks. A case in point is the original CAPAS project established in Senegal to process and market fish caught by fishermen cooperatives. As in many similar

projects, this project has failed to achieve its objective (marketing limited to less than one percent of total landings ; financial losses) due to an over-appraisal of infrastructure requirements and under appraisal of the actual efficiency of existing marketing channels (Chaboud, 1985).

Similar projects undertaken in various countries like Guinea-Bissau or Nigeria have also had limited success with many ice plants and cold chains remaining under-utilized or idle. The relative failure of infrastructure support provided so far to the small-scale sector stems from both an inadequate appraisal of actual needs and organizational or management constraints linked to the difficulty of adequately running such installation in a public or cooperative context.

New approaches for a more appropriate infrastructure support to small-scale fisheries development have been developed in more recent years. In Senegal, for example, the ADB-funded "Petite Côte" project emphasizes the construction of basic infrastructures at beach and market levels (roofed and cemented areas, running water, basic workshop facilities, amelioration of access roads, etc.) as well as the provision of credit facilities to traders for improved preservation and storage.

At community level, integrated small-scale fisheries projects like the ones associated to the Integrated Development of Artisanal Fisheries (IDAF) programme in Benin, Sierra Leone, Ghana and Guinea Conakry or the GTZ-funded Tombo project in Sierra Leone have given a similar emphasis to the provision of basic infrastructure (feeder roads, improvement of landing sites, etc.) further relying on active community participation at planning and execution levels (FAO/IDAF, 1988; Beck, 1987).

It should be further noted that although infrastructure requirements are limited, these are nevertheless growing as small-scale fisheries are becoming more sophisticated. A case in point is the increasing need for protected ports or landing sites from which larger units can operate more efficiently. In some of the more affluent coastal countries the use of ice and cold chains for the inland distribution of fresh and frozen fish has become profitable under proper management.

VII. EXTERNALLY-FUNDED PROJECTS

Externally-funded projects play an important role in the financing of small-scale fisheries. In the CECAF region, foreign assistance to the fishery sector as a whole has increased from US$ 27 million in 1978 to US$ 40 million in 1985 (Table 1).

A small but nevertheless important tendency is the growing importance of technical assistance (from 20 percent to 30 percent of total aid) as compared to capital aid. It is difficult to assess whether or not this tendency reflects the realisation by donors and recipient governments that a more balanced mix of capital aid and technical assistance is generally required for more effective results. Also to be noted is the growing importance of bilateral and EEC assistance to the sector as well as the limited role of multilateral assistance, itself due to the relatively small but rapidly growing presence of the World Bank in African fisheries whilst the African Development Bank has only recently launched fisheries projects.

Available data, presented in Table 2, indicates that the small-scale fisheries sub-sector is receiving increasing support : from less than ten percent of total foreign assistance in 1978 to over 40 percent in 1985 when it reached US$ 17 million. Aid support to infrastructure development has very much decreased in proportion and in real terms over the same period. Although no data are available for the last three years, it appears that the level of general assistance observed in 1984/85 has been sustained if not increased.

This level of assistance cannot easily be compared with total financing needs in the small-scale fisheries sub-sector ; first because it involves a fair amount of activities which are not directly relevant to production, and secondly because the financing requirements of the sub-sector are difficult to assess. Nevertheless, one can relate estimated capital aid to the small-scale fisheries with estimated yearly capital needs for imported inputs.

The CECAF canoe fleet was estimated at about 50 000 canoes in 1985 of which 35 percent (17 500 canoes) were motorized (Collart, 1986). Assuming an annual tax-free requirement of US$ 600 per canoe for gear and US$ 1 100 per motorized canoe for outboard engines, this gives an approximate figure of US$ 50 million per year. On the marketing side, transport of some 500 000 tons (out of the 700 000 tons landed) would require the use of some 2 500 pick-up vehicles at a yearly capital cost of about US$ 5 million. In toto yearly capital needs for imported inputs can therefore be conservatively estimated at about US$ 55 million. Assuming that capital aid to the sub-sector represents about 70 percent of total aid or US$ 11 million, external financing can be estimated to cover about 20 percent of yearly imported capital requirements of the small-scale fisheries sub-sector.

In terms of development budget, the dependency on external funding remains a lot higher. In Senegal, for example, external funding amounted to about 70 percent of actual expenditure in the

fishery sector, over the last two national development plans (Kebe, 1988). This dependency also implies difficulties in resource allocations and in implementation with a deficit between planned and actual expenditures in the order of 50 percent.

VIII. CONCLUSION

There is no evidence that the lack of credit facilities is a major constraint to expansion of small-scale fisheries. Auto-financing remains quite high (around 70 percent to 80 percent for most countries) and conducive to actual development.

One also notes a growing recognition that informal credit is seldom detrimental to the development of fishing activities, with the integration of production, processing and marketing capital playing an important role in reducing the risk attached to small-scale fisheries activities as well as bringing up-front capital requirements. Governments should not therefore attempt to either discourage or interfere with informal credit channels.

The general need to strengthen the role of institutional credit in rural areas is recognized as important. However, in supplementing informal credit channels with the provision of institutional credit for the small-scale fisheries sector, governments and financial institutions should ensure that such schemes are adapted to the requirements of the sector. A careful assessment of credit needs and of the procedures to be used in tailoring credit facilities to these needs as well as to the requirements of financial viability is considered an essential prerequisite.

Subsidy schemes are difficult to manage and to stop when no longer needed. They further have a number of side effects like the distortion of input use, the disruption of existing channels (viz. input and credit supply in particular) and high associated enforcement cost. Caution is therefore advised in the use of this policy instrument, especially for subsidy schemes aimed at specific target groups and fisheries. While such focus is desirable other policy instruments may be used which are more readily enforceable, less costly, more directed and less disruptive.

Subsidy schemes applicable to the whole sector rather than specific target groups or fisheries may be justified when the resource base is globally under-exploited (any required reallocation of effort being achievable through other means). In such a context a policy of low taxation on imported inputs can also be implemented.

The financing of an adequate supply of equipment at relatively uniform and competitive rates is seen as a key factor for sustained development. While there are a few counter examples, direct governmental intervention in the supply of gear and other fishing

equipment has been costly, relatively ineffective and has mostly disrupted the development of more efficient commercial importation and distribution networks. A more appropriate approach would be to impose only moderate taxes on imported inputs, to provide adequate foreign exchange, preferably through adequate market mechanisms, as well as technical support to commercial importers and distributors, and to avoid the disruption of established commercial channels through the distribution of subsidized inputs.

Governments and donors should better assess infrastructure requirements focusing on basic and more appropriate improvements to landing and marketing sites and on the provision of adequate support to the commercial sector for the progressive upgrading of preservation and marketing facilities.

Overall, the small-scale fisheries sub-sector remains quite dependent on external financing for its development. In providing such assistance to the small-scale fisheries sector, donors and governments concerned should pay increased attention to the side effects of their interventions, especially when providing inputs and services on a non-commercial basis. At a more general level, increased participation of beneficiaries and the conduct of more systematic socio-economic investigations would allow for a better assessment of actual needs and priorities as well as for more appropriate implementation, especially if flexibility is provided for in the project design.

Last but not least, a more balanced mixture between capital aid and technical assistance is required to avoid commonly-observed situation of "project overcapitalization" by which too much capital aid is being provided over too short a period of time or without the technical assistance required for this aid to be effectively "absorbed" by the recipient fishing communities. Undercapitalization of technical asssistance projects is less common but also observed and leading to missed development opportunities. Although it constitutes a partial solution to this problem, increased cooperation among donors and more effective project coordination in general are key requirements for more adequate financing of the small-scale fishery sector. In many of the countries concerned, the financing of the sub-sector could also be made more effective if the aid received through projects and the various policy measures adopted concurrently by the Government were harmonized and implemented in the context of a clearly defined development strategy.

Table 1

External fisheries assistance to coastal CECAF countries[1/]
(at current values US$ '000)

	1978	1979	1980	1981	1982	1983	1984	1985
Technical Aid	5 970	8 444	8 533	9 481	12 630	14 594	11 940	9 193
Multilateral	3 136	4 824	3 795	3 302	3 302	2 882	2 179	2 594
EEC	322	539	539	539	1 394	1 740	1 480	625
OPEC	–	–	–	–	–	–	150	150
Bilateral	2 512	3 081	4 199	5 640	7 934	9 972	8 131	5 824
Capital Aid	21 508	30 349	31 833	30 110	31 402	30 277	29 721	31 680
Multilateral	3 000	3 000	3 985	4 725	4 945	3 215	6 425	14 585
EEC	–	–	2 022	2 522	2 400	1 600	4 050	3 360
OPEC	2 400	2 400	1 799	1 799	1 799	1 900	1 900	1 900
Bilateral	16 108	24 949	24 027	21 064	22 258	23 562	17 346	11 835
Total Aid	27 478	38 793	40 366	39 591	44 032	44 871	41 661	40 873

Source : Josupeit (1987)

1/ 1985 data are preliminary

Table 2

External fisheries assistance to coastal CECAF countries by subject 1/
(at current values US$ '000)

	1978	1979	1980	1981	1982	1983	1984	1985
Research	1 145	4 075	1 947	1 947	2 036	4 807	4 841	4 650
Small-scale Fisheries	2 312	3 443	4 903	8 377	11 560	14 643	11 873	17 114
Industrial Fisheries	2 870	6 681	9 584	4 403	5 643	4 743	10 100	7 100
Infrastructures	19 028	20 052	15 035	16 119	12 200	7 704	2 837	7 041
Processing	1 202	3 198	3 708	1 798	2 972	2 815	2 414	1 327
Aquaculture	401	755	920	2 254	3 342	3 390	2 660	1 826
Economics	10	117	3 311	3 350	3 450	4 048	4 231	875
Training	472	472	958	1 343	2 829	2 721	2 705	940
Total	27 478	38 783	40 366	39 591	44 032	44 871	41 661	40 873

Source : Josupeit (1987)

1/ 1985 data are preliminary

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THE FINANCING OF INDUSTRIAL FISHERIES

by

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I. INTRODUCTION

An industrial fishing venture, as opposed to an artisanal unit, has never been clearly defined. In the CECAF area, as in other areas of the world, the fishing fleets of the coastal states represent a continuum from an unmotorized canoe to tuna purse seiners of up to 50m. Between these two extremes is a range of vessels including some e.g. the Ghanaian 30 ft vessels constructed in the mid-fifties, and the more recently constructed Senegalese Cordiers, which in some regions would be considered artisanal and in others at least semi, if not entirely industrial.

A more realistic distinction than type of vessel, but also not entirely satisfactory, might be made by considering the method of financing. Artisanal fisheries as has been noted elsewhere (Everett, 1988) are often characterized by family finance, dependance on traders and somewhat informal relationships e.g. where a formal rate of interest is not stipulated, but rather a right to sell a part of the catch. Industrial fisheries are often more vertically integrated in that catching and processing are not infrequently part of the same enterprise with output from the two activities being closely harmonized. Artisanal fishermen generally lack the financial independance that allows them to gain control over the processing (mainly smoking) and selling of the fish, and are generally more hampered by traditional social relationships.

Industrial fisheries are also characterized by significant land-based associated industries, demonstrating both backward and forward linkage. These include processing plants and ship repair facilities. Both of these have been a feature of the development of industrial fisheries in West Africa.

II. EARLY ENTREPRENEURIAL INITIATIVES

The earliest industrial fisheries development in West Africa took place in Morocco between the two world wars. The establishment of canneries and associated catching capacity was mainly the result of activities by Portuguese and French - mainly Basque fishermen, who were encouraged by the government to settle in Morocco for the express purpose of developing the Sardine fishery. After the second

world war rapid expansion of the industry took place, based on the low cost of raw material and labour and the generally low taxation within a framework of a liberal economic policy advocated by the then Protectorate government.

Significant expansion of the canning industry took place following the second world war, but nine-tenths of the capital invested was French. The rapid growth which took place in this period attracted also some speculative money from outside the fisheries or food sector, e.g. in S.A. Française Commerciale, Industrielle et Immobilière du Maroc, a trading and finance company with no previous connections with the fisheries sector, but very little purely Moroccan capital found its way into the industry and such as there was, was strongly oriented toward the marketing sector.

Domingo (1972) notes that growth of the industry was tied closely to the quotas allowed into the French market. In the fifties, however, the industry went into decline, due mainly to over- production and the saturation of the European market and as the difficulties of marketing increased it became clear that the privelege of the quota had carried some inefficient firms and had undermined the ability of the industry to compete on world markets. However, it is interesting to note that the development of the Moroccan industry played an important role as a catalyst and staging ground for initiatives in other parts of West Africa.

In the long run, perhaps the most significant of these was the development of the trawl and tuna fisheries off Senegal. Developments in Senegal originated with tuna fishermen from southwest France, who in exploiting tuna in tropical waters, were able to overcome the problems of a dead season in European waters from December to May. Later some of these turned to trawling, where yields were good from prime species, and in a sense this process was part of the general outward expansion of European fishing caused by falling yields per unit of effort in traditionally exploited northern waters. At the same time a number of entrepreneurs, who had already begun to exploit shrimp, e.g. L. Franzerri, founder of Amerger, who started by buying from artisanal fishermen in the Casamance, began to expand in order to process the fish caught by the trawlers. All of the firms created at this time including Adripêche, SPAC, Surgel, etc., were founded and for many years continued to be directed by individual entrepreneurs many of whom invested their own resources in the enterprise. The expanding trawling industry received a boost in the early seventies when Kuwaiti interests began operating a fleet of 24 vessels, later sold to Dakar companies when licencing policy began to discriminate against foreign flag vessels.

In contradistinction to the rather small beginnings of the

demersal fish processing plants the tuna canning industry was founded by large established French companies. At first (beginning in 1954) tuna was landed only for storage and eventual transhippment. It very quickly became clear, however, that processing on shore in Dakar gave clear economic advantages compared with shipping frozen tuna to Europe. The initial investments in canning plants were made by Ets Guyader of Concarneau (CICA), Saupiquet and various groups of Breton and Basque fish processing interests. As is usual with such profitable new industries there was expansion, followed by some over-capacity and subsequent contraction.

Details of the various amalgamations are given by Rocheteau (1982) who notes that the growth of the industry was tied closely to the supply of raw material and the problems of marketing. With the object of encouraging the growth of an industry controlled by Senegalese interests a restrictive policy towards the licencing of French flag vessels was followed which had the effect of limiting the supply of tuna to the canneries. On the other hand under a special arrangement similar to that negotiated by the Moroccan canners earlier, the French market offered a guaranteed outlet for certain quantities of canned tuna at advantageous prices. While this encouraged the growth of a Senegalese processing industry the favourable conditions offered, as in the case of the Moroccan canneries, undermined the ability to compete and made it difficult to sell on any other market. At the same time as noted below, attempts to develop a Senegalese tuna fleet met with limited success and the Dakar canneries are still heavily dependent on imported raw material.

Developments in the southern part of the region - Congo and Cameroon, were largely along the same lines as those in Senegal, and in fact preceeded them by several years. However, expansion was less marked than in the northern part of the region, due mainly to a poorer resource base. Trawling first started in the Congo in 1948 and was introduced by French owner-operators of small, mostly secondhand trawlers, landing for the domestic market. As in Senegal these fishermen invested their own resources and the only government contribution was some research and development work in the form of a Portuguese fisherman brought from Morocco to introduce purse seining. Somewhat later came the establishment of rather larger enterprises than the small owner operated ventures, among these was COTONNEC founded by an ex-air force officer, originally from Concarneau (and thus with fishery connections) who began fishing in 1957 with two wooden boats and employing some 15 people. By the mid-seventies the company owned six trawlers of 24m., its own cold store and a handling hall, and two chillrooms. It also owned three insulated vans to supply iced fish to Yaoundé and other up-country towns and employed some 150 people full time. About 30 percent of the initial capital was put up by the founder and his immediate

family and the balance by a French bank and the Cameroon Development Bank.

In the Anglophone countries the early growth of industrial fishing was not dissimilar, but there was a larger local financial participation. In Nigeria, for example, three of the five enterprises operating in the late fifties had Nigerian directors and in Ghana during the same period almost all initiiatives were by Ghanaians. Fish has always played an important part in the cultural and economic life of Ghana and it was natural that surplus funds should find their way into the fisheries sector. Two of the principal pioneers of industrial fishing in Ghana, Robert Ocran of Mankoadze Industries, and En Soli of Soli Fisheries, came from fishing families but made money in other sectors, which, when new and more lucrative methods of fishing were introduced, was invested in mechanized fishing craft. These developments are described in Lawson and Kwei (1974), which gives a interesting description of the growth of an African industrial enterprise. In the late seventies and early eighties, industrial fishing was affected by the difficult economic conditions which the Ghanaian economy was experiencing. This, coupled with the effect of limited fishing opportunities brought about by the new Law of the Sea, led to the demise of most of these early ventures, only Ocran surviving to the present time.

Apart from developing Mankoadze fisheries in Ghana and branching out into the other fields of economic activity, e.g. engineering, Ocran also established an important fisheries operation in the Gambia. At the same time he had an influence on developments in Nigeria, where he persuaded Michael Ibru to invest in the fisheries sector, money he had made as a car salesman. The main interest of Ibru, however, was (and has remained) the marketing of fish much of which in the late sixties and early seventies was produced by the chartering of freezer trawlers and carrier vessels from the USSR. With the rapid expansion of the Nigerian market following the discovery of oil in the mid-sixties this was a more profitable business than owner operation of vessels, although Ibru also entered this field through association with the Japanese firm Taiyo in the Osagiere Fishing company. This company began shrimp operations in distant waters with Japanese constructed trawlers and also operated several inshore trawlers.

In general in the Anglophone countries, with the exception of Liberia, there was little foreign intervention. In Sierra Leone, however, during the nineteen-fifties (and to a lesser extent in Ghana) there were fishing operations by Italian owner operators, who had obtained boats on hire purchase from the Banca di Sicilia as part of a scheme for the post war rehabilitation of the Sicilian fishing industry. Some fishermen broke their agreement and moved to the west coast of Africa; they left, however, little permanent mark on the industrial fisheries of west Africa, although at least one

Italian firm still continues to operate in Liberia.

The major industrial scale fisheries activity in Liberia, however, was until the coup of 1980, the Mesurado Fishing Co. Ltd. along with other companies, owned by the Tolbert family, including Liberian Cold Stores Incorporated and Mesurado Shrimp Export Incorporated. The operation was founded by Stephen Tolbert, brother of the President and one-time Minister of Finance, who was already a relatively wealthy man when chartering three small inshore vessels in 1955 to land fish for the domestic market. This activity was the nucleus of what became a much larger group engaged also in various manufacturing activities - a shipping agency and commercial agricultural developments. The company, which was managed by professional ex-patriate staff, reported profits of over $60 million in 1979, of which the turnover of the fishing companies (including the operation of 23 shrimpers and 6 fish trawlers) was some $15 million. Since the coup and management by government nominees, profits have declined and the company is now bankrupt.

III. POST 1960 DEVELOPMENTS - EMPHASIS ON THE PUBLIC SECTOR

The pioneering phase of the establishment of owner operators and the development of small businesses into larger ones came to an end in many countries shortly after Independence. Many of the firms continued to operate, but current economic philosophies of the day, which emphasized physical capital formation as the road to economic development, led to policies which did not encourage small-scale entrepreneurial initiatives. This philosophy of the need for large scale investment was accepted by both Keynesian and Marxist economic theorists and to it was added a perception that national independence and sovereignty were meaningless without a measure of industrial self-sufficiency. This economic orthodoxy was readily accepted by governments many of which were, for historical reasons, predisposed to accept a socialist approach to development, involving state intervention in the economy.

In the fisheries sector this was the period of the State Fishing Corporation in Ghana, the establishment of SOSAP (Société Sénégalaise d'Armement à la Pêche) in Senegal and similar initiatives elsewhere, e.g. in Nigeria, Ivory Coast and the Gambia - in this latter case aided by FAO/UNDP. In Mauritania, with the aid of booming mining revenues and a $10 million French loan, the government made an ambitious attempt to establish a Mauritanian fishing industry by the purchase of 13 trawlers and the establishment of shore-based processing facilities.

This period of reliance on public companies lasted from about 1960, when the Ghana government entered into negotiations for the purchase of 6 purse seiners for their proposed state tuna venture, up until the early eighties, when more liberal economic policies

again began to be fashionable and when it was aparent that the state-controlled companies had not worked. During this period, apart from the establishment of state companies, other forms of government intervention such as reserving to government the import of fish, and price control, were also introduced.

Events in Ghana have been described by Lawson and Kwei (1974) and in Senegal by Domingo (1982). Both these accounts describe the rise and fall of state fishery enterprises in the respective countries and the stories are remarkably similar. Among the main causes of failure in both cases was the ordering of technically unsuitable or out-dated equipment. In both countries poor management and government interference in the commercial operation of the companies were also to be blamed. In particular, over-staffing was widespread and cash flow problems leading to a shortage of working capital were serious problems. In the case of SOSAP, where the aquisition of vessels was financed largely by relatively short term loans, the rapid rate at which new vessels were added to the fleet, upset the financial equilibrium of the company and interest payments on vessels were due before they had even started fishing.

To these problems has to be added at a later date difficulties concerning places for the vessels to fish, as the provision of the new Law of the Sea gradually came to be implemented after 1977. This was a decisive factor for the Nigerian National Fish Company, founded in the euphoria of the oil boom and on the expectation of fishing agreements with Angola and Mauritania, which have never been fully made use of.

The trend towards more government involvement in the fisheries sector during this period however, did not generally run to outright nationalisation. In Senegal for example, in spite of SOSAP there was relatively little interference with the private sector, although a policy of Senegalization of crews was introduced in the late seventies. Rocheteau (1982) notes that the fish processing sector, completely integrated into the national economy and likely to depend increasingly on Senegalese vessels for its raw materials, is an obvious target for Senegalisation. That it has not yet happened is attributed to the fact that the mainly French entrepreneurs have behaved always as though they were Senegalese, largely re-investing their profits in further expansion of their enterprises. The same is generally true in other Francophone countries (with the exception of Guinea). In Ghana, on the other hand, the private sector did encounter opposition during the Nkrumah government.

During this period the growth in the catch was disappointing and all the more so when compared with the hopes and expectations raised by the possibilities of the new Law of the Sea. Between the beginning of the sixties and the early seventies the catch by

industrial vessels rose from about 220,000 tons to some 375,000 tons, and in 1980 was of the order of 530,000 tons - an annual rate of about 5.5 per cent in the first period and 3.5 in the second. While these are respectable rates by international standards, almost all the growth occurred in two countries - Morocco and Senegal, and even in these countries there was some re-flagging of vessels to benefit from the more favourable treatment accorded to local vessels.

IV. THE PRESENT SITUATION - EMPHASIS ON THE PRIVATE SECTOR

It is clear that a third period is now emerging in the development of the region's fisheries - one characterized by greater reliance on private sector initiative. This is, however, a lopsided process. No particular steps (over and above the subsidies which were already available) are being taken to encourage private initiative, and the main effect of this change in philosophy is that in many cases the assets of previously public companies are now becoming available to the private sector. In practice the process of privatization is making little progress as businessmen, facing a more liberal economic climate which often includes reduced protection for their businesses, have little cash to spare. In addition, local financial institutions are so poorly developed that they are unlikely to attract the savings of small investors who in any event have little accumulated savings to invest.

Institutions exist, however, in nearly all countries to provide funds for the purchase of equipment and for the creation or expansion of fishing enterprises. The commercial banking system of course exists to lend money, but without some softening, its terms are, except for the most efficient enterprises, often too tough for the average fishing company. If not exactly softening, help for fishermen who wish to borrow from the commercial banks is provided by such schemes as Nigeria's Agricultural Credit Guarantee Scheme, which will guarantee up to 75% of any loan to the agricultural (including fisheries) sector.

Beyond the commercial banks there are often state or parastatal development banks or institutions for the disbursement of international funds, such as SOFISEDIT (Société Financière Sénégalaise pour le Développement de l'Industrie et du Tourisme) in Senegal, or the Union des Banques du Developpement in Mauritania. Rates of interest and terms and conditions of the loans vary according to the economic circumstances of the particular country and for those institutions which are recycling foreign lines of credit the rates of interest charged to borrowers will depend on the terms on which the credit was granted.

The conditions faced by borrowers from Senegal's Crédit Maritime, a fisheries window of SOFISEDIT, but without hypothecated

funds, are probably fairly typical. The express purpose of the Crédit Maritime is to assist the development of industrial fisheries in Senegal and it lends principally to Senegalese borrowers, although it will lend to foreigners if the project to be financed is fully integrated into the Senegalese economy. Loans are made for up to 12 years and borrowers are expected to find 25% of the cost of the project from their own resources; Crédit Maritime will finance up to 50%, and commercial banks or other lending stitutions are expected to provide 25%. As already noted, rates of interest vary depending on the line of credit used to finance the project, but in practice most loans have been made at 12 to 14%. Crédit Maritime is also empowered to purchase shares in companies as a means of augmenting capital.

In Morocco a similar arrangement has recently been introduced to finance the coastal fishery, again in the form of a special fisheries facility (Crédit Maritime) within a larger organization - the Caisse Nationale de Crédit Agricole (CNCA).

The CNCA has two credit lines:

(i) short term credits (repayable over 12 months) used to finance day to day expenses such as ice or diesel;

(ii) medium to long term credits (repayable over 2 to 12 years). These longer term credits relate to two activities:

(a) fishing activities

- construction of vessels in Morocco
- purchase of new vessels abroad
- purchase of new gear or other equipment for an existing vessel
- major repairs

(b) related activities

- processing
- marketing
- etc.

These credits relate only to vessels (150 GRT landing their catch fresh, thus excluding the freezer fleet exploiting the cephalopods).

The CNCA provides finance for up to 70% of the total cost. The interest varies from time to time but is fixed once the loan has been granted. Present rates are 11% per annum, although under the marine investment code coastal vessels qualify for a 2% rebate

financed by the state. Since only coastal vessels qualify it means of course that the CNCA is effectively lending at 9%.

This arrangement has been in existence only since the beginning of 1988 and it remains to be seen what effect it will have on the expansion of the fishery. Previously the Banque Nationale de Développement Economique made finance available for the high seas fleet, but has not financed any vessels since 1982. Profits made during the boom years of the cephalopod fishery, however, permitted some construction from retained earnings and joint venture partners have also played an important rôle. Expansion of this fleet at present seems unlikely due to a strict licencing policy which reflects problems of resource availability (Cunningham - personal communication).

Foreign suppliers of equipment and foreign financial institutions also play a part in financing the growth of industrial fisheries in West Africa, particularly for export fisheries, but this option is only realistically open to entrepreneurs in countries where the purchase of foreign exchange does not present problems, which in effect, means mainly the franc zone. In some countries, for example, foreign exchange from exports has legally to be surrendered to the government; in principle, export companies are given priority in the allocation of foreign exchange, but in practice there are often difficulties and such investments are risky. Similarly, in countries such as Nigeria and Ghana, where foreign exchange is freely available under competitive bidding arrangements, the effective rate of exchange is such as to preclude all but the most lucrative investments, which are not often found within the fisheries sector.

Foreign exchange difficulties will also limit the possibililty of local fishing companies taking advantage of short term finance provided by overseas buyers. Satia (1988) reports that in Cameroon support is given to local fishery companies by overseas shrimp clearing agents. The amounts range from about 200 - 300 million FCFA; these loans which carry a rate of interest of 7 - 13%, are used for the purchase of fuel and ice, crates, payment of rents, taxes, etc. Kebe (1988) notes also in Senegal the use of credits from French banks guaranteed by the Compagnie Française du Commerce Extérieur (COFACE) and by USA, Swiss and Spanish banks guaranteed by the Banque Internationale pour l'Afrique Occidentale and the Banque Nationale de Développement du Sénégal.

The variety of experience makes it difficult to generalize about the future of industrial fisheries in the region. The northern countries are determined to develop local industries to maximise local value added and to derive the maximum economic benefit from the resources of their EEZs. So far, finance has not been a significant constraint, even if substantial sums have come

from overseas sources; lines of credit with European banks, joint venture financing and in some cases, assets given in exchange for fishing rights. Donor agencies continue to be an important source of funding for industrial fisheries. The Caisse Centrale de la Cooperation Economique, for example, has in recent years provided funds to Senegalese and Guinean enterprises for vessels, and credits for the modernisation of tuna cannaries in Côte d'Ivoire. Local financing has, however in some cases, not been negligable, e.g. the Banque Mauretanienne pour le Commerce et Developpement (now merged with the Fond National de Developpement) has invested some 1.7 milliards Ouguiya ($22 million) in new vessels and equipment over the past 10 years and the Moroccan Banque Nationale de Développement Economique has probably invested considerably more.

The northern part of the region includes also the Gambia, Guinea, Guinea Bissau and Sierra Leone, all of which have rich resources off their coasts presently exploited by foreign fleets. In none of these countries also is finance the major factor inhibiting a greater local participation in the fisheries. In the Gambia in fact there is considerable entrepreneurial interest in the fisheries, some of which (concerned with land-based processing) have been successful. Among these is National Partnership Enterprises, a small firm which began like some of the now larger Senegalese firms, by buying shrimp from artisanal fishermen and exporting them - in this case through agreement with an overseas firm. The success of this enterprise demonstrates that if limited credit facilities are available outside, development agencies should not try to force the pace of growth and firms should be allowed to grow at their own pace. In other cases a failure to understand the special features of the fishing industry has led some otherwise successful investors into trouble. In Guinea Bissau the major problem is one of a low level of industrialization generally, and a poorly developed infrastructure. In Guinea, which is only now entering a phase where capital accumulation is being encouraged, there are signs of local entrepreneurial initiative.

In the southern countries the main obstacle to expansion is lack of fish. South of Sierra Leone the waters are generally less productive and coastlines are generally shorter with consequently smaller EEZs. In this context the achievement of Mankoadze fisheries, which by joint ventures and foreign agreements has managed to construct a considerable industrial operation, is all the more significant. However, even Mankoadze has suffered in line with the problems of the Ghana economy and, in particular, during the early stages of the second Rawlings government in 1982, whose populist approach to economic relations put employers in a disadvantageous position, vis-à-vis the employed. In the francophone countries small industrial sectors exist mainly controlled by French interests, e.g., in Gabon, but local enterprises are slowly taking over as in the case of COTONNEC

recently sold to Cameroon interests. The future of some of these enterprises is uncertain, particularly if they are confined to operations in national EEZs and for this reason there has already been a contraction in industrial fishery operations from the Congo.

In attempting to indigenise the fisheries in the northern part of the region, the countries face many non-financial problems. For example, local value added remains small, due to the large percentage of foreign crews, and in Mauritania the relatively small degree of local land-based processing. This is likely to decrease still further, as it is now clear that freezer trawlers are more profitable than ices boats. In Senegal the processing industry, with the exception of a few large efficient firms, is in crisis with increasing over-capacity as more and more ice boats go out of business and vessel owners turn increasingly to the more profitable freezer trawlers.

Perhaps the major problem faced by the West African coastal countries in their efforts to develop or expand an industrial fishery sector with major local participation is that which has its origins in the immense growth of fishing effort combined with the restrictive provisions of the Law of the Sea. When industrial fishing first began in the second half of the fifties, total catch from the region was of the order of half a million tons, compared with over 3 milion tons in 1986. Most stocks were relatively lightly fished and none was over-exploited. With the growth in fishing effort catch per unit of effort has fallen to levels at which new ventures have little or no margin for the mistakes of learning and replacement investment looks a much less attractive proposition than did the original aquisition fifteen years ago.

In these circumstances, it can be said that the industrial fisheries of West Africa face financial problems, but not a lack of finance. The problem resembles more the classical economic over-fishing situation, which has characterized the fisheries of the north Atlantic since the beginning of the present century, i.e. a situation of increasing effort and declining yields per unit of effort - particularly for the most commercially valuable species. In the north Atlantic the response was to subsidize the industry, thus maintaining fishing effort at a high level and making no contribution to the long term solution of the problem. In most West African countries the industry is also subsidized (for rather different motives) but the subsidy - which will have the same perverse effect as in the north Atlantic - is probably necessary to combat the competitive advantage which the (also often subsidized) foreign fleets enjoy. The problem is thus as much political as economic.

To the problems of poor fish stock management have to be added the problems of poor business management. It is a common

observation in the region, that acgess to finance is becoming increasingly difficult because of a poor record of lending to the sector. This complaint underlines the generally low level of business management in the region. Some firms have prospered, e.g. Mesurado (up to 1980), Africamer and Ibru, but these have generally been the better-managed ones. The more successful firms have also generally derived a significant proportion of their profits from marketing fish, rather than catching it. There is a danger that the needs of the domestic market will continue to draw local savings and entrepreneurial ability into the marketing sector, where the risks from foreign competition are less and returns more rapid, to the detriment of the primary producing sector.

Finally, it may be objected that the fact that finance is not available to all and the terms on which it is granted require a considerable contribution from the entrepreneur/investor, represents a serious handicap to the development of industrial fisheries in the region. This may be questioned. The reasons for the demonstrated superiority of private over public enterprise is a subject which belongs as much to the realms of social psychology as it does to economics, but the investment of significant sums of accumulated savings in an enterprise is indicative of a certain seriousness of purpose and gives an incentive to succeed. The easy availability of investable funds conversely is likely (but not inevitably) to attract a less serious approach. In any event it is essential that any business venture, especially in a field as risky as fishing should have ample working capital which is unlikely to be available in cases where a large proportion of the invested capital is borrowed.

V. CONCLUSION

In such a large area as West Africa, including a wide range of economic achievement, it is difficult to generalize, but a few conclusions may be drawn. Although the development of financial institutions varies from country to country the range of possible sources of investable funds, both domestic and foreign, makes it unlikely that a commercially profitable opportunity would be left unexploited solely because of lack of finance. It is clear also that there is no lack of entrepreneurial spirit and if the casualty rate is high it is due to unwise investment and the inherent riskiness of the fisheries sector. This is probably understood by many potential entrepreneurs and is one of the reasons why fisheries is considered a less attractive avenue of investment than commerce where the risks are less and the competition less severe.

Among the other factors which operate against the expansion of the West African industrial fisheries the most important is the heavily exploited nature of the resource which has driven down yields per unit of effort to levels which must make all but the most

efficient operations unprofitable. Given that in many countries efficient operation is hindered by infrastructural inadequcies, insufficient supplies of spare parts and other problems associated with a low level of economic development, the difficulties of expanding industrial fisheries can be understood. It is often forgotten that the fishing industry is part of a wider economic situation, and if this is malfunctioning there is no reason why fisheries should be exempt from the consequences. There can be little doubt that the disasterous economic environment in several countries of the region has, at various times, impeded the development of industrial fisheries.

While the present emphasis on privatisation is a move in the right direction, it will of itself not promote development and it would be unfortunate if with the changing intellectual fashion the rôle of the state in industrial fisheries development became completely eclipsed. Beyond appropriate taxation and fiscal policies, given the diagnosis of this paper a most important rôle for the state will be monitoring control and surveillance especially in those cases where it is necesssary to maintain high yields per unit of effort for the profitable operation of local fleets. Although it is impossible to lay down blue-prints it should not be forgotten that in those formerly "developing" countries, where the fishing industry is now a viable economic entity, that state often played a vital rôle in its launching.

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